



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/002,031 | 12/31/1997 | JAMES H. ADAMS JR. | 78-824 | 7362 |

7590 08/12/2004

ASSOCIATE COUNSEL (PATENTS), CODE 1008.2
NAVAL RESEARCH LABORATORY
WASHINGTON, DC 20375-5000

EXAMINER

JONES, HUGH M

ART UNIT PAPER NUMBER

2128

DATE MAILED: 08/12/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/002,031 | ADAMS ET AL. <i>SJ</i> |
| | Examiner Hugh Jones | Art Unit 2128 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 31 December 1997.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-15 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 31 December 1997 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Introduction

1. **Claims 1-15 of U. S. Application 09/002,031 filed on 31-December-1997, are presented for examination.**

2. Ordinarily, the extensive reference to tables and figures would be objected to.

The Examiner has analyzed of the claims, figures and tables and has reached the following conclusion. There does not appear to be a reasonable way to claim the claimed subject matter without resort to reference of the figures/tables, as per MPEP 2173.05 (s):

"2173.05(s) Reference to Figures or Tables

Where possible, claims are to be complete in themselves. Incorporation by reference to a specific figure or table "is permitted only in exceptional circumstances where there is no practical way to define the invention in words and where it is more concise to incorporate by reference than duplicating a drawing or table into the claim. Incorporation by reference is a necessity doctrine, not for applicant's convenience." Ex parte Fressola, 27 USPQ2d 1608, 1609 (Bd. Pat. App. & Inter. 1993) (citations omitted). Reference characters corresponding to elements recited in the detailed description and the drawings may be used in conjunction with the recitation of the same element or group of elements in the claims. See MPEP § 608.01(m)."

Information Disclosure Statement

3. **Applicants have incorporated by reference numerous documents, but have not provided the documents to the office. In so far as the documents constitute essential matter, 1) they must be reviewed by the Examiner and 2) available for all readers of any issued patent.**

Art Unit: 2128

4. Please provide a complete copy of each of the items of art incorporated in the specification. Applicants are reminded of their duty to disclose as per the provisions of 1.56 and 1.105. **Please note the accompanying requirement for information under 1.105.**

Specification

5. The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

6. Furthermore, the attempt to incorporate subject matter into this application by reference to hyperlinks is improper. It is not clear whether 1) the hyperlink will always be accessible, and 2) the hyperlink will be available to the public at large.

7. It is noted that the specification references the incorporated by material via such terms as *supra* and *infra*.

Drawings

8. Figures 1, 2, 4-7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in

Art Unit: 2128

compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

9. Claims 1-15 are objected to under 37 CFR 1.75(c), for the followings reasons. The claim structure, respectfully, does not appear to comport with standard U.S. practice, and the claims are difficult to interpret in view of the variously improperly incorporated materials. It is extremely difficult to determine the metes and bounds of the claimed invention.

10. Claims 6-9, 14-15 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to properly limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. It is noted that the claims refer to intervening claims, but without the proper language which unambiguously indicates a dependent claim. For example, claim 6 requires performing the steps A-C of claim 1. It is noted that there are only steps A-C in claim 1. Therefore, claim 6 appears to depend on claim 1. However, the claim does not recite , in the preamble, "The method of claim 6, wherein...".

Art Unit: 2128

11. Claim 14 is objected to under 37 CFR 1.75(c) as being in improper form because of the multiple dependency (depending upon claims 1, 12). See MPEP § 608.01(n).

Accordingly, the claim not been further treated on the merits.

12. Claims 1-15 are objected to because of the following informalities: The letters denoting limitations appear to be repeated. For example, claim 6 requires that step A includes steps A-C of claim 1 (redundancy on "A") and then lists step "B" (redundancy on "B"). Appropriate correction is required.

Claim Rejections - 35 USC § 112

13. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

14. Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

15. The claims rely upon improperly incorporated material. Reference to that material is made via such terms as *supra* and *infra*. It is impossible to unambiguously determine what constitutes the specification. It would therefore require undo experimentation to

enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

16. Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

17. The claims rely upon improperly incorporated material. Reference to that material is made via such terms as supra and infra. It is impossible to unambiguously determine what constitutes the specification. Thus, the invention was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

18. There are a number of issues relating to incorporation by reference and the 112(1) rejections which are now addressed. It is noted that the instant application incorporates essential non-patent literature in the specification.

Section 2163.02 of the MPEP Standard for Determining Compliance With the Written Description.

"The courts have described the essential question to be addressed in a description requirement issue in a variety of ways. An objective standard for determining compliance with the written description requirement is, "does the description clearly allow persons of ordinary skill in the art to recognize that he or she invented what is claimed." In re Gosteli, 872 F.2d 1008, 1012, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989).

Art Unit: 2128

Under Vas-Cath, Inc. v. Mahurkar, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991), to satisfy the written description requirement, an applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention, and that the invention, in that context, is whatever is now claimed. The test for sufficiency of support in a parent application is whether the disclosure of the application relied upon "reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter."

Ralston Purina Co. v. Far-Mar-Co., Inc., 772 F.2d 1570, 1575, 227 USPQ 177, 179 (Fed. Cir. 1985) (quoting In re Kaslow, 707 F.2d 1366, 1375, 217 USPQ 1089, 1096 (Fed. Cir. 1983)).

19. Whenever the issue arises, the fundamental factual inquiry is whether a claim defines an invention that is clearly conveyed to those skilled in the art at the time the application was filed. The subject matter of the claim need not be described literally (i.e., using the same terms or in haec verba) in order for the disclosure to satisfy the description requirement. If a claim is amended to include subject matter, limitations, or terminology not present in the application as filed, involving a departure from, addition to, or deletion from the disclosure of the application as filed, the examiner should conclude that the claimed subject matter is not described in that application. This conclusion will result in the rejection of the claims affected under 35 U.S.C. 112, first paragraph - description requirement, or denial of the benefit of the filing date of a previously filed application, as appropriate. 220 F.3d 1345, 55 U.S.P.Q.2d (BNA) 1636 (Fed. Cir. 2000)."

20. Enablement and written description are separate and distinct issues as it relates to the question of incorporation by reference. A rejection based on the enablement requirement of the statute may not be sustainable in this regard since the general incorporation of a U.S. patent by reference in appellant's specification may be sufficient to indicate what is likely to be known by persons of ordinary skill in the art. Cf. *In re Howarth*, 654 F.2d 103, 210 USPQ 689 (CCPA 1981). *The issue of compliance with the description requirement, however, is another matter entirely.* In this connection, attention is directed to *In re Blaser*, 556 F.2d 534, 194 USPQ 122, 125 (CCPA 1977). The function of the description requirement is to ensure that the applicant had possession, as of the filing date of his application, of the specific subject matter later claimed by him. It is required that the specification describe the invention sufficiently for those of ordinary skill in the art to recognize that the applicant invented the subject matter he now claims. *In re Smythe*, 480 F.2d 1376, 178 USPQ 279, 284 (CCPA 1973). That a person skilled in the art, given the incorporated disclosures, *might* decide to combine the teachings as indicated by "*supra*" or "*infra*" or mere general reference, with those explicitly disclosed by Applicants is not a sufficient indication to that person that such is described as a particular feature of appellant's invention. *The doctrine of incorporation by reference is of no avail to applicants in this regard since there is no specific indication in the instant specification of the particular features disclosed by the incorporated references which correspond to those as claimed; nor does the specification identify the specific portions of the patent which applicant may have intended to rely upon to supplement his disclosure.* The purpose of incorporation by

Art Unit: 2128

reference in an application of matter elsewhere written down is for economy, amplification, or clarity of exposition, by means of an incorporating statement clearly identifying the subject matter which is incorporated and where it is to be found. *In re de Seversky*, 474 F.2d 671, 177 USPQ 144, (CCPA 1973).

21. The use of *infra* and *supra* is not a showing of particularity. It is impossible to determine what constitutes the specification from a review of the specification.

22. **The following is a quotation of the second paragraph of 35 U.S.C. 112:**

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

23. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. It is noted that the specification references the incorporated material via such terms as *supra* and *infra*. It is impossible to determine the metes and bounds of the claims. Although limitations from the specification are not read into the claims, the claims are interpreted in light of the specification. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). This claim is an omnibus type claim.

24. The curves in the figures referenced by claim 8 indicate a relative term which renders the claim indefinite. The accuracy of the curve and experimental error associated with the curves are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Interpretation - No Prior Art Rejections

25. No prior art rejections are provided at this stage of the prosecution in view of the many 112 issues. See MPEP 2173.06 (Prior art rejection of claim rejected as indefinite):

"...where there is a great deal of confusion and uncertainty as to the proper interpretation of the limitations of a claim, it would not be proper to reject such a claim on the basis of prior art. As stated in *In re Steele*, 305 F.2d 859, 134 USPQ 292 (CCPA 1962), a rejection under 35 U.S.C. 103 should not be based on considerable speculation about the meaning of terms employed in a claim or assumptions that must be made as to the scope of the claims."

26. The claims structure, respectfully, does not appear to comport with standard U.S. practice, and the claims are difficult to interpret in view of the variously improperly incorporated materials. It is extremely difficult to determine the metes and bounds of the claimed invention.

Conclusion

27. Any inquiry concerning this communication or earlier communications from the examiner should be:

directed to: Dr. Hugh Jones telephone number (703) 305-0023, Monday-Thursday 0830 to 0700 ET, or the examiner's supervisor, Kevin Teska, telephone number (703) 305-9704. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, telephone number (703) 305-3900.

mailed to: Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to: (703) 308-9051 (for formal communications intended for entry) or
(703) 308-1396 (for informal or draft communications, please label
"PROPOSED" or "DRAFT").

Dr. Hugh Jones
Primary Patent Examiner
August 8, 2004



HUGH JONES, Ph.D.
PRIMARY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Art Unit: 2128

Requirement for Information - 37 C.F.R. § 1.105

1. In the course of examining or treating a matter in a pending or abandoned application filed under 35 U.S.C. 111 or 371 (including a reissue application), in a patent, or in a reexamination proceeding, the examiner or other Office employee may require the submission, from individuals identified under § 1.56(c), or any assignee, of such information as may be reasonably necessary to properly examine or treat the matter.

2. **Patent Owners of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application:**

All material incorporated or referenced in the specification;

The date of release of CREME96;

All contributors to CREME96

The incorporated material which has not been submitted to the office is essential and is required by the Examiner. Furthermore, the specification is replete with such terms as *supra* and *infra* in the context of the various incorporated materials. It is impossible to determine what constitutes the specification without consideration of said materials. The information pertaining to the CREME96 disclosure is required because Applicants state (line 1, page 33, specification), that:

“Code for CREME96, a preferred embodiment of the present invention, follows.”

3. Applicants are reminded that *The PTO Exclusively Determines What Information May Be “Reasonably Necessary” to Patentability Determination*. Beyond that which a patent applicant is

Art Unit: 2128

duty-bound to disclose pursuant to 37 C.F.R. § 1.56, an examiner may require the production of "such information as may be reasonably necessary to properly examine or treat the matter." 37 C.F.R. § 1.105. *The examiner, not the applicant, determines what information is necessary to the patentability determination.*

4. A complete reply to a § 1.105 requirement is a reply to each enumerated requirement for information giving either the information required or a statement that the information required... is unknown and/or not readily available." See Manual of Patent Examining Procedure at § 704.12(b). If an applicant fails to prosecute or otherwise abandons its claim within the time period fixed by the Commissioner in an Office Action, the application shall be regarded as abandoned. 35 U.S.C. § 133; 37 C.F.R. § 1.135.

5. **Applicants are reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.555.** Where Applicants do not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained will be accepted as a complete reply to the requirement for that item. Applicants are reminded that they have referred to the material in the specification.

6. **This requirement is an attachment of the enclosed Office action.** A complete reply to the enclosed Office action must include a complete reply to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action.

Art Unit: 2128

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be:

directed to:

Dr. Hugh Jones telephone number (703) 305-0023, Monday-Thursday 0830 to 0700 ET, *or* the examiner's supervisor, Kevin Teska, telephone number (703) 305-9704.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, telephone number (703) 305-3900.

mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 308-9051 (for formal communications intended for entry)

or (703) 308-1396 (for informal or draft communications, please label "PROPOSED" or "DRAFT").

Dr. Hugh Jones

Primary Patent Examiner

August 8, 2004

Hugh J. Jones
HUGH JONES PH.D.
PRIMARY PATENT EXAMINER
TECHNOLOGY CENTER 2100